

Construction Update Report

20220720

Open Projects

1. **Air Carrier Apron Rehabilitation, Phases 6A & 7 (\$10.5M)**. The purpose of this project is to improve the (RON) remain overnight positions for the commercial aircraft carriers. Phase 7 consists of improving the (RON) remain overnight positions on the apron. The airport has designed, permitted and bid the entire project. We received an FAA Grant (\$2.5M) for the first phase of the apron Phase 7-1 in FFY21. The entire project cost for phase 7 is approximately (\$9.0M). Construction started for Terminal Apron Phase 7-1 and is complete. A grant from the FAA for the balance of Phase 7 (7-2, and 7-3) was received in 2021. It is anticipated it will take approximately 16 weeks to finish this project in the 2022 construction season. This includes the balance of the concrete apron and storm water controls. **Construction is anticipated to be completed by the end of July this year.**

Progress:





2. **Taxiway G Realignment – Phase 2 (\$19M)**. The purpose of this project was to complete a full parallel taxiway to the airport's main runway for safety reasons. Completed. Final Payments and Closeout.
3. **Airport Master Plan Update (\$1.5M)**. The purpose of the Mater Plan is to look at the needed improvements to the airport over the next 10 years. Completed. Final Payments and Closeout are taking place.
4. **Annual Parking Garage Maintenance (est. at \$300K per year)**. The purpose of this maintenance is to ensure the longevity of the parking garage. We anticipated and were ready to start the replacement of the expansion joints and joint seal repair in the vicinity on the floors above the Tesla charging area. Due to the pandemic and travel restrictions the maintenance project was postponed. We have met with our Engineer on the garage to reevaluate the current situation with needed garage repairs. We have an RFP out for the replacement of all lighting and the fire alarm system with bids due July 20. We are working on the RFP for the stairwell and expansion joint improvements.
5. **Terminal Integration Projects (TIP) (\$16M)**. The purpose of this project is to consolidate the TSA security checkpoint into one location for overall terminal efficiencies and a better passenger experience. The new TSA screening equipment is being installed along with all the finishing touches.

TIP Progress:





6. **New Access Security System Upgrade (\$1.5M)**. The purpose of this project was to update outdated access security equipment. Project is complete close out in progress.
7. **In-line Baggage Screening System Design (\$.75M)**. The purpose of this project is to update the baggage screening system from independent system to a more efficient streamlined in line baggage system. A TSA design grant was applied for in 2020. We had the RFP/Q out on September 16, 2020 and received proposals on October 16, 2020. The proposal review process for this design project was completed. We have submitted the selected proposal (Passero Associates PA) to the TSA. The final technical review is complete and we are in the contracting phase. We received the approximate \$635,000.00 OTA. City Council has approved. Preferred Alternative Report was completed and reviewed by the local TSA. Received local TSA's support of the preferred alternative. Schematic design submitted to TSA and accepted. At this point we are completing 30% design plans and estimating pricing.
8. **Chamberlin School HVAC Improvements (\$2.0M)**. The purpose of this project was to provide air conditioning and mechanical ventilation in order to avoid the need to open windows for natural cooling. A fully ducted ventilation system to help mitigate sound transmission. Completed working on closeout close out with FAA.
9. **Residential Sound Insulation Pilot Project (\$1.5M)**. The purpose of the project is convert a sample of incompatible residential units to a compatible land use by installing an acoustical treatment package which

will provide relief from aircraft noise by upgrading interior living areas. Upgrades may include replacement of windows and doors with acoustically rated products and installation or upgrade of ventilation systems. The sound insulation treatments are designed to reduce the interior noise levels to below 45 DNL and provide a minimum noise level reduction of 5dB. This project will also determine the eligibility of an additional 50 residential units, located in and around the 70 DNL which will be included in future phases of the program. This Program including: Program formulation, Home eligibility determination, Project Management, Community Outreach, Evaluations of Structures, Design Services, Bid activities, Construction Support, Construction and Pre-qualification of 50 home package The Airport and Consultant team has established program standards, implemented a pilot phase for sound insulation, and developed and created a public outreach program that defines the process. FAA. The Acoustical Testing of 19 homes has taken place. They were all deemed eligible. Based on the completed acoustical testing we requested approval from the FAA for blanket approval of homes in the 70 dB contour to move to outreach and design without additional testing from the FAA. This has been approved by the FAA. Design is complete for improvements to 9 homes. Received bids on May 5 for 9 homes and starting the AC/BOF/CC and contracting process.

10. **Hot Spot Remediation/RW 1 PAPI Relocation (\$3.5).** The purpose of this project was for aircraft airfield safety as identified needs by the Airport and FAA. This project addresses the development of the construction contract documents (plans and specifications) for the BTV hot spot mitigation including: Runway 1-19 guard lights and relocate signs and hold lines at Taxiways Bravo and Charlie. Provide a painted island at the intersection of Taxiways Alpha and Charlie to create a defined taxiway edge prior to the General Aviation (GA) apron when taxiing on Taxiway Alpha. Provide partial GA taxiway approximately 25' wide x 800' long parallel to Runway 1-19 at the approach end of Runway 1. (See # 14. Below) This taxiway is to be designed to TDG 1 and ARC B-1 (small) standards, including drainage improvements. Removal of surplus pavement at intersection of Runways 1-19 and 15-33 at Taxiway Echo. The removal of pavement will mitigate runway incursions from Taxiway Echo. Proposed relocation of Runway 1 PAPI (4 box) to accommodate the new hold line relocation on Taxiway Charlie. Mill and overlay a portion of Taxiway Charlie. Coordination with the FAA for reimbursable agreements on PAPI, new instrument approach procedures, design reviews, and FAA construction support/inspections. Construction is complete on the Raised Guard Lights, Marking and TW C Mill and Overlay. Final billing and close out is moving forward.
11. **NOAA/NWS Terminal Renovations (\$1.5M).** The purpose of this project was for improvements needed to meet the requirements of the recently signed long term lease of this leased terminal area. This project consists of upgrades to the already NWS occupied area negotiated in the recent lease process completed. Improvements in lighting, electrical and control improvements, ceiling tiles, kitchen upgrade, new HVAC units, office renovations, etc... Bids were received from 5 firms with Engleberth being the selected contractor. We worked with GSA/NOAA and NWS to determine how we move forward. GSA reviewed the low proposal schedule of values and made adjustments to the scope. Completed amendment to the contract with GSA/NWS which reflects their commitment to proceed and provide funding for additional items they requested, not covered under the existing contract. Contract with Engleberth was executed. Project is substantially complete and moving to close out.
12. **Noise Monitoring Equipment (\$.5M).** The purpose of implementing this system allows the public and local jurisdictions accurate information about aircraft operations and their associated noise levels at the airport in South Burlington, Winooski and Williston. The entire system is live and accessible via link to the public. We are currently in the process of completing the FAA Grant Closeout Process.

Proposed, at this time, FFY22 Grant Applications from FAA ACIP

13. Taxiway A Mill & Overlay (est. \$2.5M). The purpose of this project is maintenance and the addition of safety measures to include new edge lighting and paved shoulders. The scope and proposal to have been received from the consultant (McFarland and Johnson Consulting, Inc.) A scoping session with the FAA was completed. The FAA Independent Fee Estimate (IFE) process has started. The permitting preparation process has started. The project consists of the rehabilitation of approximately 21,000 SY of existing Taxiway A pavement between Taxiway C and Taxiway G. Additionally, the project will include the construction of one 20-foot asphalt shoulder. The major project components include the mill and overlay of approximately 21,000 SY of existing taxiway pavement, the construction of approximately 4,000 SY of taxiway shoulder pavement, the installation of new taxiway edge lighting, airfield signage, and other ancillary items. Bids were received on April 20, 2022 and a grant application was prepared and submitted on April 29, 2022. Will move to AC/BOF/CC next for grant offer acceptance and contractor approvals.

14. TW K Construction (\$1.5M). The purpose of this project was for aircraft airfield safety as identified needs by the airport and FAA. Grant has been received with construction anticipated to be completed by the end of July.

Progress:





15. RW 1 PAPI Relocation Reimbursable Agreement (RA) (Part of the TW K project). The purpose of this project was for aircraft airfield safety as identified needs by the airport and FAA. PAPI Relocation has been completed.

16. Residential Sound Insulation Project - Phase 1 (\$2.20M) The purpose of the project is convert incompatible residential units to a compatible land use by installing an acoustical treatment package which will provide relief from aircraft noise by upgrading interior living areas. Upgrades may include replacement of windows and doors with acoustically rated products and installation or upgrade of ventilation systems. The sound insulation treatments are designed to reduce the interior noise levels to below 45 DNL and provide a minimum noise level reduction of 5dB. This project will provide construction improvements to homes located in and around the 70 DNL. The Airport is proposing to continue implementation of its Residential Sound Insulation Program (RSIP). This grant will include: community outreach, historic review, design and bidding of 54 homes, 6 homes which construction improvements will be completed with the Pilot Program. Properties will be located within the 70+ DNL FAA approved 2023 noise contour. Bids were received on April 22, 2022 and a grant application was prepared and submitted on April 29, 2022. This is moving to AC/BOF/CC next for grant offer acceptance and contractor approvals.

17. Gate 12 Jet Bridge (\$2.0M). The purpose of this project is to provide a fully enclosed access for passengers to the commercial aircraft using the Terminal Gate 12 location on the Apron from the new TIP. Received scope and proposal from the consultant (Jacobs Engineering Group). The FAA scoping session was

completed with the FAA. The Independent Fee Estimate (IFE) process is underway. This project is for the installation of a new Passenger Boarding Bridge (PBB). The new PBB will be located at the south end of the Terminal Integration Project (TIP), which is currently under construction. The second floor of the TIP will serve as the Gate 12 hold room. The new PBB will eliminate the need for passengers to descend a stairwell, walk across the apron, and board aircraft via a stair truck. Accessibility for disabled passengers will be drastically improved as well. This project is being initiated now to identify the preferred rotunda location and PBB configuration while the TIP project can still accommodate changes. **Bids were received on April 27, 2022 and a grant application was prepared and submitted on April 29, 2022.** This is moving to AC/BOF/CC next for grant offer acceptance and contractor approvals.

18. Southern - Apron and TW G Ext. Development (\$5.0). The purpose of this project is to provide much needed additional general aviation apron area on the airfield. Received scope and proposal from the consultant (Hoyle, Tanner and Associates) and have completed the FAA scoping session. The FAA IFE process is complete. The proposed project would extend Taxiway G approximately 100', construct a 19,000 SY general aviation apron in the area of the "quarry". Excess material from the site would be used to fill in the "gully" creating a level area along the Medium Intensity Approach Light System (MALSF) approach lighting plane replacing two light stations currently on towers with ground mounts and connecting the vehicle service road from the civilian to the military side of the airport. Scope for design and bidding has been completed with an IFE. Design is underway. There has been a delay in design due to the availability of the geotech contractor. Request for bids have been issued. The geotech report confirmed that a total fill of the gully is not economically feasible at this time. We anticipate grant application upon receipt of bids.

19. Environmental Assessment (est. \$.25M). The purpose of this project is to evaluate environmental impacts related to the mitigation of obstructions within the aircraft approach surfaces to the runways. This is in follow up to the recently completed Master Plan, which includes obstruction identification and environmental review. The scope and IFE process is complete and a grant application was prepared and submitted on April 29, 2022. This is moving to AC/BOF/CC next for grant offer acceptance and contractor approvals.

20. Glycol System Upgrade (est. \$3.5M). The purpose of this project is to improve the glycol system. The FAA has determined they will not fund at this time. We are regrouping on how to move this forward.

21. Noise Exposure Map (NEM) (est. \$.85M). The purpose is to update the map is due to the full one year of F-35 operations at the airport. Prepare a 14 C.F.R Part 150 Noise Exposure Map (NEM) update for Burlington International Airport (BTV). The NEM Update will replace the NEM maps which were approved in 2019. This update is needed due to the change in Vermont Air National Guard based aircraft to the F-35A. The previous NEM Update indicated an update would be completed once the F-35A aircraft have been operational for one year. The scope and IFE process is complete and a grant application was prepared and submitted on April 29, 2022. This is moving to AC/BOF/CC next for grant offer acceptance and contractor approvals.

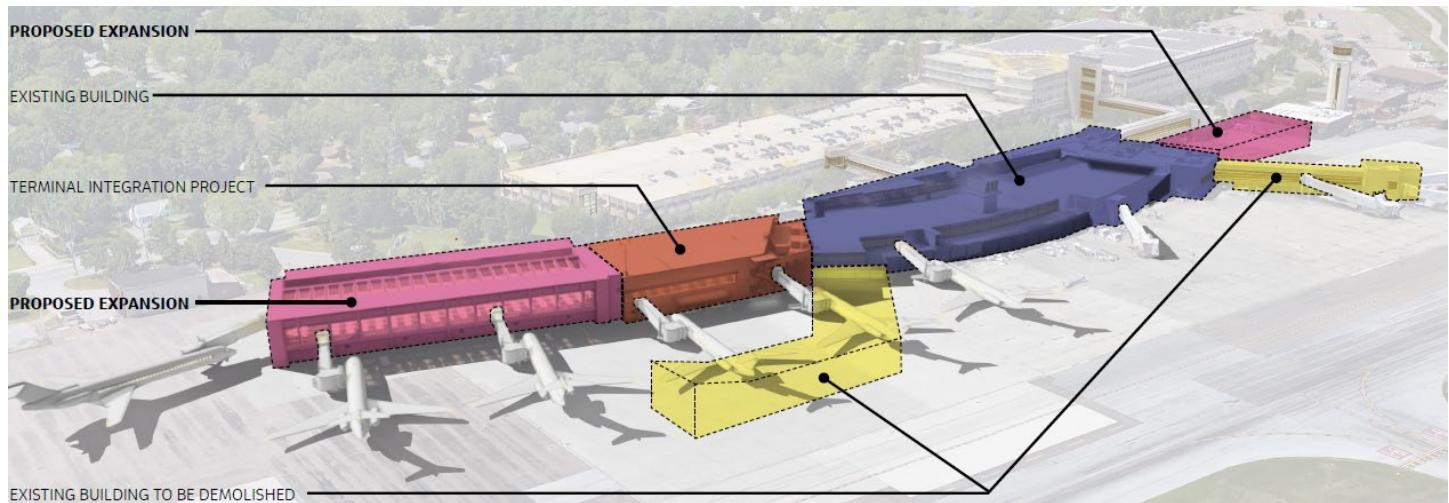
22. South Terminal Improvement Project (\$35M). The purpose of this project is for overall terminal efficiencies and a better passenger experience. Due to increased aircraft seating existing passenger hold areas are overcrowded during peak times as identified in the recent Master Plan Update. Recently the opportunity had risen through the Airport Terminal Improvement Program from the Bipartisan Infrastructure Law. We have submitted our request for full build out of this project Phase II Terminal Improvement Project, including: Demolition of the existing South Concourse; new Terminal improvements (approximately 45,000 SF of new gross floor area on 2 levels); five (5) new aircraft gates; four (4) new passenger boarding bridges(PBB), new passenger circulation and hold rooms; future concessions space; and apron construction

within demolished South Concourse footprint. The Phase II Terminal improvements will be approximately 160' farther from Taxiway A as the existing South Concourse.

23. North Terminal Improvement Project (\$2.0M). The purpose of this project is for overall terminal efficiencies and a better passenger experience due to the completion of the TIP the north terminal will be upgraded to provide more capacity for passengers and concessions. This includes the removal of the existing north TSA station along with the removal of the existing escalators. This project is under design and funding is anticipated from the recent approval of the Infrastructure Law. We anticipate having this out to bid in this week with a grant application immediately upon receipt of bids.

24. North Terminal Improvement Project and New PBB's (\$45M). The purpose of this project is for overall terminal efficiencies and a better passenger experience. Due to increased aircraft seating existing passenger hold areas are overcrowded during peak times as identified in the recent Master Plan Update. Recently the opportunity had risen from Senator Leahy's office through Congressional Directed Spending. We have submitted our request for full build out of this project Phase III Terminal Improvement Project, including: Demolition of the existing North Concourse; new Terminal Improvement (approximately 25,000 SF of new gross floor area on 2 levels); five (5) new aircraft gates; six (6) new passenger boarding bridges (PBB), new passenger circulation and hold rooms; future concessions space; and apron construction within demolished North Concourse footprint.

Conceptual Renderings – North and South Terminal(concourse) Improvements



Miscellaneous Projects Being Completed Currently

New Maintenance Garages (both), Roofs





New Reconstructed Maintenance Garage Yard:

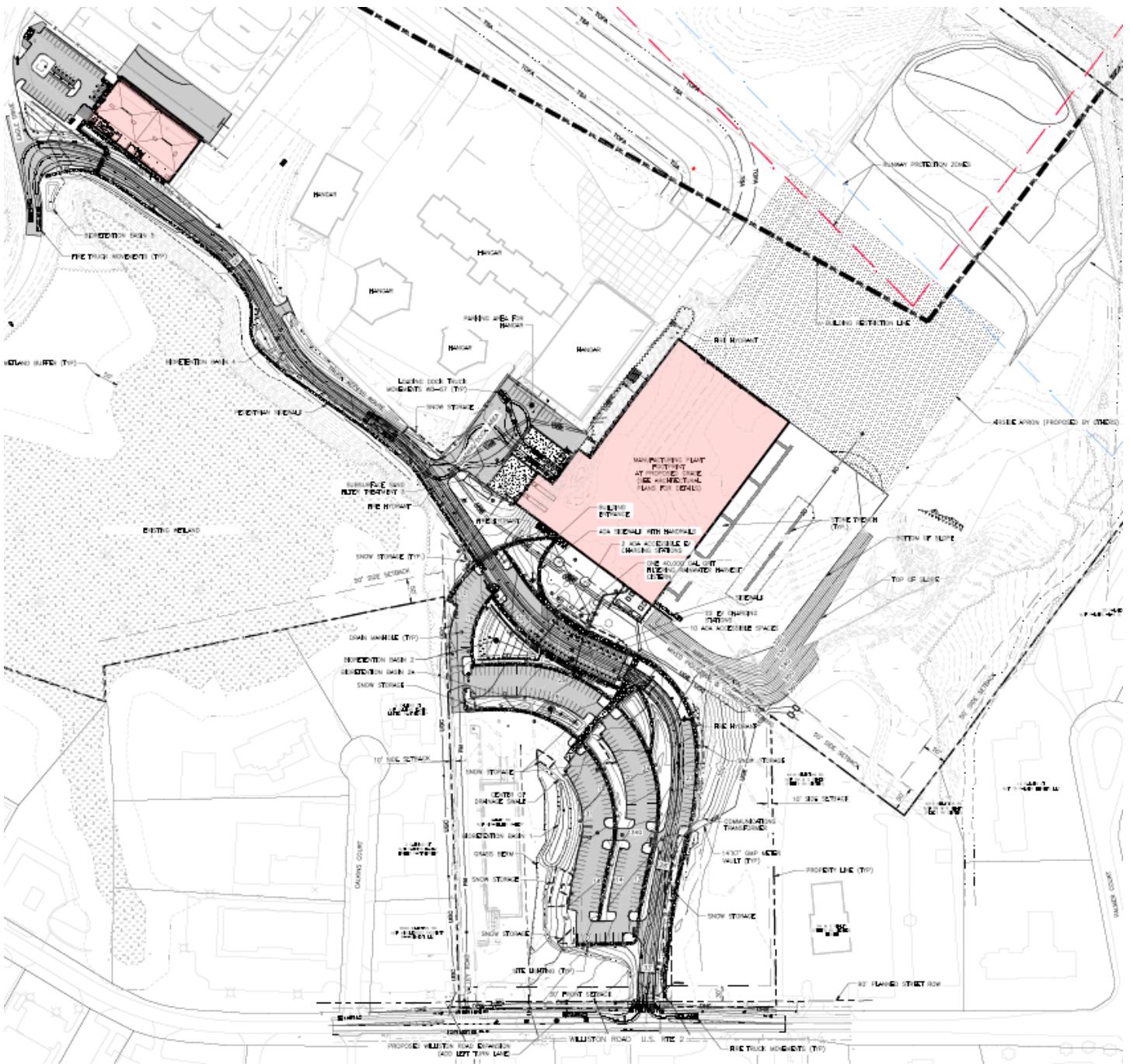


The Gateway Project Completed – Williston Road and Airport Drive
Will be addressing the sign/letters ASAP.



BETA – Development

Communication and coordination with Beta on the first phase of the electric aircraft assemble facility for all aspects of permitting, environmental, engineering, utilities and attendance at public hearing and construction meetings.



Aerial with project locations – see attached

Projects coming:

Maintenance Garage/SRE Storage
Tech Center Assistance